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PATENTRemarks

The Office Action dated December 3, 2003 has been carefully reviewed and the foregoing amendment has been made in consequence thereof.

Claims 1-20 are pending in this application. Claims 7-11 stand rejected. Claims @@@ stand objected to. Claims 1-6 and 12-20 are allowed.

The objection to Claim 7 is respectfully traversed.

Claim 7 has been amended to recite "each flange comprising a plurality of notches . . . each said pivot bearing configured to engage one of the plurality of notches in the flange . . ." Applicant submits that the amendment corrects the informalities noted by the Examiner. Accordingly, Applicant respectfully requests that the objection to Claim 7 be withdrawn.

The rejection of Claims 7-11 under 35 U.S.C. § 103(a) as being unpatentable over Hitachi (JP 58-013259) in view of Chaix et al. (US 4,640,537) is respectfully traversed.

Hitachi describes "A flange structure of this invention comprises an upper clawed flange 7 and a lower clawed flange 8, which are clamped together by means of bolts 5 extended between the flanges 7 and 8. A claw 9 of the upper flange 7 and a claw 9 of the lower flange 8 are aligned with each other and located on the inside of a lip seal section 6. Since, by employing such an arrangement, the force of the clamping bolts acts to coupling faces 4, no bending stress around the lip seal section 6 is produced. Further, since the bending caused by tightening of the bolts 5 is relieved by turning at the claw section, no bending load is acted to a valve cover 3 and a flange portion 2, with only a compressive load being acted to the coupling faces."

Hitachi does not describe nor suggest a coupling spring ring as recited in Claim 7. Particularly, Hitachi does not describe nor suggest a coupling spring ring that includes a plurality

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of bolt bores extending therethrough from the first surface through the opposing second surface, and a plurality of bolt bore seats located in said second surface and coaxially aligned with said bolt bores. The Office Action admits, at page 3, that Hitachi "does not disclose using a plurality of bolt bore seats coaxially aligned with the bolt bores".

At least for the reasons set forth previously, Chaix et al. do not describe nor suggest a coupling spring ring as recited in Claim 7.

As the Federal Circuit has recognized, obviousness is not established merely by combining references having different individual elements of pending claims. Ex parte Levingood, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. & Inter. 1993). MPEP 2143.01. Rather, there must be some suggestion, outside of Applicants' disclosure, in the prior art to combine such references, and a reasonable expectation of success must be both found in the prior art, and not based on Applicant's disclosure. In re Vaeck, 20 U.S.P.Q.2d 1436 (Fed. Cir. 1991). In the present case, neither a suggestion or motivation to combine the teachings of Hitachi and Chaix et al., nor any reasonable expectation of success has been shown.

Applicant submits that, contrary to the suggestion of the Office Action, it would not be obvious to a person skilled in the art to modify the bores of Hitachi to include bore seats as taught by Chaix et al. because there is no motivation to do so. Particularly, the Office Action suggests that it would be obvious to add bore seats to the Hitachi so that the bolts are only axially stressed, thereby reducing the chance of bending. Applicant disagrees with this suggestion because Hitachi describes that any bending caused by tightening the bolts is relieved by turning at the claw section, no bending load is acted to the valve cover and the flange portion, with only a compressive being acted to couple the faces. Applicant submits that adding the bolt bore seats

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of Chaix et al. to Hitachi would be redundant and an unnecessary expense because the apparatus taught by Hitachi already compensates for any potential bending forces. In fact, Hitachi teaches away from the use of bolt bore seats. Therefore, there is no motivation to modify the teachings of Hitachi with the teachings of Chaix et al.

For the reasons set forth above, Applicant submits that Claim 7 is patentable over Hitachi and Chaix et al.

Claims 8-11 depend from independent Claim 7. When the recitations of dependent Claims 8-11 are considered in combination with the recitations of Claim 7, Applicant respectfully submits that Claims 8-11 likewise are patentable over Hitachi and Chaix et al.

For the reasons set forth above, Applicant respectfully requests that the Section 103(a) rejection of Claims 7-11 be withdrawn.

In view of the foregoing amendments and remarks, all the claims now active in this application are believed to be in condition for allowance. Favorable action is respectfully solicited.

Respectfully submitted,



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